

In the Claims

The following Listing of Claims replaces all prior versions in the application:

LISTING OF CLAIMS

1. (Currently amended) A process for deterministic transmission of asynchronous data in packets issued by acquisition and processing systems, in the field of data acquisition and telemetry of testing installations, comprising the following steps:
storing in which data arriving asynchronously in FIFO registers,
packeting data from said FIFO registers in a first set of packets, in a first packeting cycle,
according to a predetermined order is stored in buffers as it arrives and then transmitted within a
delay not exceeding a time TT, said process comprising the following steps:
receiving data contained in a set of said buffers in a plurality of packeting modules;
commencing a first packeting realization cycle of a duration TP in said packeting
modules, said packeting realization cycle including, for a first set of packets, start of packeting,
packeting with sorting and enhancement of these datas, in multiple packeting modules,
end of packeting and sending of packets,
ending, for after sending of a request by a message composition module, ending said first
packeting cycle in said packeting modules,
forwarding said first set of packets, said packet realization cycle in said packeting
modules at the request of a message composition module configured to receive the outputs of all
the packeting modules and to control the packeting cycle;
forwarding to said message composition module said first set of packets regardless of the
state of completion of said the first packeting realization cycle, to said message composition
module, such that the condition $TP = TT$ is substantially met when $TMS \ll TP$, with TMS being
transmission time;
commencing beginning a second packeting realization cycle for a second set of packets;
recovering said first set of packets by the message composition module, one packet after
the other another the first set of packets, in a predefined order, to form a first in the message,
composition module;

~~setting, in a formatting module, a the first message in electrical format, in a formatting module, in a protocol used for the comprised of the first set of packets to an electrical format in a protocol used for message transmission to form an output message,~~

~~outputting said output message, by the output module on a transmission line, said method allowing synchronizing the start and end of packets in relation to their transmission in the output message.~~

2. (Currently amended) A device for deterministic transmission of asynchronous data in packets issued by acquisition and processing systems, in the field of data acquisition and telemetry of testing installations, said device, ~~said transmission occurring within a time delay not exceeding a duration TT,~~ comprising:

at least one input module receiving said asynchronous data;

a plurality FIFO registers ~~of buffers~~ configured to receive digital data from the at least one input module;

a plurality of packeting modules connected to said FIFO registers ~~buffers~~;

at ~~the least~~ one control module for FIFO register ~~buffer~~ dump, monitored by at least one packeting module of said plurality of packeting modules;

a message composition module receiving the outputs of said plurality of packeting modules for composing a message therefrom, said message composition module configured to control the packeting cycle in sending to each of said plurality of packeting modules an order to terminate a packet assembly procedure regardless of whether said packet assembly procedure is completed, ~~such that the condition $TT = TP$ is met when $TMS \ll TP$, wherein TP is a packeting time and TMS is a transmission time;~~

a packet formatting module configured to format said message from said message composition module; and

an output module configured to transmit said message on a transmission line.

3. (Previously presented) The process of claim 1, further comprising conducting data acquisition and real-time processing for test installations of new aeroplanes.